

Title (en)  
PROCESS FOR REMOVING RESIDUAL WATER MOLECULES IN PROCESS FOR PRODUCING METALLIC THIN FILM, AND PURGE SOLVENT

Title (de)  
VERFAHREN ZUR ENTFERNUNG VON RESTWASSERMOLEKÜLEN IN EINEM VERFAHREN ZUR HERSTELLUNG EINES METALLISCHEN DÜNNFILMS UND SOWIE SPÜL-/REINIGUNGSMITTEL DAFÜR

Title (fr)  
PROCÉDÉ D'ÉLIMINATION DES MOLÉCULES D'EAU RÉSIDUAIRES DANS UN PROCÉDÉ DE PRODUCTION D'UN FILM MÉTALLIQUE MINCE, ET SOLVANT DE PURGE

Publication  
**EP 2407576 A1 20120118 (EN)**

Application  
**EP 10750648 A 20100215**

Priority  
• JP 2010052199 W 20100215  
• JP 2009060883 A 20090313

Abstract (en)  
The present process for removing residual water molecules is suitably used in a metallic thin film production method of forming a metallic thin film on a substrate. The residual-water-molecule removal process involves removing residual water molecules using a gas generated by vaporizing a purge solvent. Preferably, the purge solvent is an organic solvent or an organic solvent composition having a water content at the azeotropic composition of at least 20% by mass. With the present residual-water-molecule removal process, water molecules remaining in the system can be removed efficiently in the production of metallic thin films by the ALD method or the like, and thus, the film-formation time can be shortened and metallic thin films can be produced efficiently.

IPC 8 full level  
**C23C 16/44** (2006.01); **C23C 16/455** (2006.01); **C23C 16/52** (2006.01); **H01L 21/02** (2006.01); **H01L 21/285** (2006.01)

CPC (source: EP KR US)  
**C23C 16/44** (2013.01 - KR); **C23C 16/4402** (2013.01 - EP US); **C23C 16/4482** (2013.01 - EP US); **C23C 16/45534** (2013.01 - EP US); **C23C 16/52** (2013.01 - KR); **H01L 21/285** (2013.01 - KR); **H01L 21/28562** (2013.01 - EP US); **H01L 21/28194** (2013.01 - EP US); **H01L 28/55** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**US 2011268887 A1 20111103**; CN 102272349 A 20111207; EP 2407576 A1 20120118; EP 2407576 A4 20130220; JP WO2010103893 A1 20120913; KR 20110134376 A 20111214; TW 201035339 A 20101001; WO 2010103893 A1 20100916

DOCDB simple family (application)  
**US 201013143298 A 20100215**; CN 201080004145 A 20100215; EP 10750648 A 20100215; JP 2010052199 W 20100215; JP 2011503751 A 20100215; KR 20117015523 A 20100215; TW 99105995 A 20100302